

PREVENTION AND TREATMENT OF DENGUE FEVER BY HOMOEOPATHIC RESEARCH: REVIEW

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ABSTRACT: *Dengue is ranked as the world's most severe mosquito-borne infectious disease, with a 30-fold rise in its prevalence over the past 50 years. The dengue/dengue haemorrhagic fever (DHF) outbreak is a global public health crisis that poses substantial health and economic burden. The shortage of vaccines and antiviral medications to prevent and control this epidemic further complicates the dengue crisis. This systematic analysis discusses and compares numerous trials in homoeopathic medicine for dengue fever prevention and treatment. As a double-blind placebo-controlled experiment, a comparative research study, a case study and two community-based trials, a literary search through multiple databases helped find a few important studies. Good findings for the role of homoeopathic drugs as a prophylactic medication were identified in community-based trials. There was no difference in results between the two groups in the double-blind, placebo-controlled experiment. A retrospective clinical analysis found that, as opposed to conventional maintenance care, the homoeopathic mixture proved to be a more potent treatment against dengue fever. The case analysis indicates positive outcomes, but there are only 10 cases in the sample size. Conclusion To confirm the success of homoeopathic therapeutics, high-quality randomised controlled trial (RCT), vitro and animal model trials are needed in the future.*

KEYWORDS: *Dengue, Fever, Homoeopathic, Remedy, Treatment.*

INTRODUCTION

These days, dengue ranks because the most critical mosquito-borne viral disorder in the international. inside the beyond 50 years, the incidence has improved to 390 million dengue infections consistent with 12 months. A virus of dengue/dengue haemorrhagic fever (DHF) is a chief public fitness problem in tropical and subtropical nations within South-East Asia, Western Pacific, Latin and primary America.

The prevalence of dengue has grown clearly around the world in current decades. Almost 2.5 billion human beings—extra than forty% of the arena's population—are actually at risk from dengue. As in line with an estimate, there are likely to be 390 to 400million dengue infections per year. This infection price is greater than 3 times the dengue burden estimate through the sector fitness employer (WHO). An envisioned 500,000 people with intense dengue need hospitalisation every 12

months, and a massive percentage of whom are youngsters. About 2.5% of these affected deaths. There is no precise allopathic remedy for dengue or intense dengue.

The worldwide burden of dengue is alarming and represents a developing project to the public fitness sector and policymakers. Dengue is spreading anywhere at some stage in the tropics with the high-risk zones inside the Americas and Asia. Best in Asia Pacific international locations, there are greater than 70% dengue infections. India on its own contributed almost 34% infections of the worldwide burden[1].

The range of dengue cases pronounced in India after adjustment for underreporting from a case examine in Madurai district and changed into calculated with the aid of an expert Delphi panel as every year common of five,778,406 clinically showed dengue cases between 2006 and 2012, or 282 times the reported determine in step with yr. The entire value burden for medical care according to annual in India turned into the U.S. \$548 million[2].

Dengue causes a massive fitness and economic burden to many tropical international locations. Growing urbanisation, populace growth and population mobility have contributed to the similarly spread-out of dengue-affected zones beyond the tropical and subtropical areas. The dengue disaster is in addition complex through the shortage of vaccines and antiviral tablets for prevention and control of this ailment.

Until these days, dengue fever became notion to be caused by 4 exceptional serotypes. The 5th variation DENV-5 was remoted in October 2013. This serotype follows the sylvatic (animal) cycle unlike the opposite 4 serotypes, which follows the human cycle. Discovery of DENV-five and more such sylvatic traces inside the future may also further abate the Dengue Vaccine Initiative.

As there may be no definite line of treatment to be had in traditional medicinal drug, most people at some stage in an episode of dengue decide on complementary and alternative medicinal drug (CAM) to increase the platelet remember. Among all the alternatives Carica papaya leaf juice is most extensively utilized in Asian nations.

Homoeopathic literature cites several medicines for the remedy of dengue. it is stated that during dengue homoeopathy has a capability to lower the intensity of fever, body ache, weak point, headache, loss of urge for food, nausea and other related signs and symptoms. Nobert Galatzer in his article posted in homoeopathic herald in January 1949 (volume 10, variety 10) states that the homoeopathic remedy of dengue fever (70 cases) proved an awful lot more

efficient than the allopathic. The typical headache on turning the eyes couldn't be alleviated with the aid of the same old analgesics, while Bryonia, Belladonna and Gelsemium have been most useful. As a substitute homoeopathic prescribing shortened the path of fever by using 4 or 5 days and alleviated the general discomfort and brought forth a faster recuperation in comparison with 100 instances treated with the modern-day medicinal drug.

In 1996, the crucial Council for studies in Homoeopathy said that a homoeopathic prophylactic become administered to as a minimum 39,two hundred human beings in the Delhi vicinity in the course of a pandemic of dengue. The observe-up of 23,520 human beings, 10 days later, found out that best five people developed a moderate symptom of dengue.

Studies completed in Brazil in 2001, 2007–2008 and 2012 and studies posted from Pakistan and Cuba illustrate that homoeopathy has an effective function as preventive and curative for dengue fever, and additionally it can keep away from or lessen its serious complications. This literature review aimed to evaluate all sorts of observational, randomised and managed trials of homoeopathic intervention for investigating the effectiveness of homoeopathy for prevention and treatment of dengue fever[3][4].

DISCUSSION

Due to the growing prevalence, geographic extension and financial burden of dengue transmission, dengue is seen as a primary project to the physicians, sufferers and policy makers. In traditional medicine there's no unique line of treatment for dengue fever or till date neither having any secure tetravalent dengue vaccine; therefore, remedy is solely supportive and symptomatic in nature.

Non availability of specific line of treatment, high demise price and extreme difficulty of the ailment lead maximum patients with dengue to choose CAM remedy. Proof of the effectiveness of homoeopathy in epidemic sicknesses has been well verified for long time beginning from Hahnemann's use of Ignatia amara inside the remedy of a chronic and sporadic fever in youngsters in January 1797, to until date in controlling the leptospirosis in Cuba through the usage of relatively diluted micro organism, Leptospirillum as a homoeoprophylactic[5].

In this literature review, only one double-blind placebo controlled trial, randomised managed trial (RCT), one comparative medical observe and three homoeoprophylactic studies were retrieved. Due to the paucity of the research, it's far hard to show the effectiveness of homoeopathy in dengue fever. The most effective double-blind placebo-controlled trial done with the aid of Jacobs et al19

confirmed no difference in final results among the 2 companies. The fundamental flaw of the take a look at became the small sample length, and most effective 3 instances have been confirmed to have dengue through laboratory evaluation. The parameter for analysis of the take a look at become handiest ache and fever, wherein in nowadays's technology CBC is the first-rate parameter to assess the case of dengue. The parameters of pain and fever are not justifiable. The perception of the ache is subjective, and it may be variable from man or woman to man or woman. The VAS scale used for ache become no longer popular scale to be used for adults as this scale is used for youngsters. For fever, temp-o-dot oral strips were used, and such types of practices aren't used in research studies. In homoeopathic arm, the combination used of six drug treatments in 12C efficiency turned into Aconite, Belladonna, Bryonia, E. Perfoliatum, Gelsemium and R. Toxicodendron, which contradict the cardinal precept of use of unmarried medicine in homoeopathic therapeutics. This mixture also contradicts the treatment relationships noted in *materiamedica* in which it states that Aconite, Belladonna and Bryonia are as an alternative antidotes to R. Toxicodendron.

The comparative scientific study by way of Hassan et al showed that the homoeopathic combination appeared to be a stronger remedy in opposition to dengue fever when evaluate with popular renovation remedy. For this take a look at, combination of 10 drugs is used, which once more contradicts the standards of homoeopathy, and again treatment courting is not accompanied as within the list of drug treatments used for the trial. Most remedies are antidotes of every other. The pattern length is small. The effect of said routine on pain and fever is not stated, but statistical statistics on pathological basis are virtually considerable[6].

The case collection of dengue fever by way of Mahesh et al confirmed beneficial consequences with individualised homoeopathic therapy, but the end result followed natural remission of the ailment itself. The range of instances turned into very much less to attract verify the belief[7].

The network-based totally studies confirmed positive outcomes for the position of homoeopathic drugs as a prophylactic remedy in a targeted populace while it was used earlier than the outbreak of dengue, however the most important downside of these types of studies become the lack of publicity to large size populace and very constrained geographical area. Any other vital drawback of these studies turned into a lack of a fashionable protocol which is required for such sort of network research.

In the destiny to take in such network studies, a protocol primarily based on the WHO pointers should be used in one-of-a-kind geographical areas at the equal

time to show the efficacy of homoeopathy for prevention of dengue fever. There is a want of big sample length studies with wellknown protocols on the basis of laboratory parameters for RCT to conclude the position of homoeopathy in dengue fever[3].

To strengthen our technological know-how as much as the ranges of latest scientific advances is the earnest need of the time. There's a need for unambiguous interventions to improve the clinical management of dengue in homoeopathy in place of philosophical reasons and abstract theories. Already progressed diagnostic and prognostic assessments are to be had inside the area, which can be used to prove the efficacy of the medicine. Healing development ought to be performed with the aid of vitro studies and animal models[8].

CONCLUSION

The stated research claim the hit use of combination homoeopathic therapy in the remedy of dengue and each unmarried and combination therapy for prevention of dengue. With such milieu, the choice of homoeopathic drugs for prophylaxis and treatment stays the fundamental notion-frightening question, and the well timed want for a few preferred norms for prescribing is important.

From literature to be had within the subject of homoeopathy, it is stated that homoeopathy is quality for healing and preventive therapy in dengue fever, however research studies do no longer offer definitive proof of the preventive or curative efficacy of homoeopathy. In addition RCT research are required to prove the efficacy of homoeopathic therapeutics in tackling of dengue infections, with the intention to also pave the manner for the remedy of other viral infections.

Nowadays, the entire world is suffering towards a ramification of epidemic diseases, and with homoeopathic individualised approach and with the knowledge of artwork of individualisation, we can't reach to all of us. It's far authentic that individualised technique to homoeopathic treatment is recommended, however in epidemics it's miles very difficult to put in force, so genus epidemicus is the choice provided by way of Dr. Hahnemann to address with various epidemics. To cope with the want of the time, we must intelligently mixture the directions laid in our healing machine to assist the humankind in combating the epidemics.

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REFERENCES

- [1] J. D. Stanaway *et al.*, "The global burden of dengue: an analysis from the Global Burden of Disease Study 2013," *Lancet Infect. Dis.*, 2016, doi: 10.1016/S1473-3099(16)00026-8.
- [2] D. S. Shepard, E. A. Undurraga, Y. A. Halasa, and J. D. Stanaway, "The global economic burden of dengue: a systematic analysis," *Lancet Infect. Dis.*, 2016, doi: 10.1016/S1473-3099(16)00146-8.
- [3] R. Marino, "Homeopathy and Collective Health: The Case of Dengue Epidemics," *Int. j. high dilution res*, 2008.
- [4] L. A. D. S. Nunes, "Contribution of homeopathy to the control of an outbreak of dengue in Macaé, Rio de Janeiro," *Int. j. high dilution res*, 2008.
- [5] G. Bracho *et al.*, "Large-scale application of highly-diluted bacteria for Leptospirosis epidemic control," *Homeopathy*, 2010, doi: 10.1016/j.homp.2010.05.009.
- [6] S.-H. S, T. I, K. A, and K. S, "Comparative clinical study on the effectiveness of homeopathic combination remedy with standard maintenance therapy for dengue fever," *Trop. J. Pharm. Res.*, 2013.
- [7] J. Jacobs, E. Fernandez, B. Merizalde, G. Avila-Montes, and D. Crothers, "The use of homeopathic

- combination remedy for dengue fever symptoms: a pilot RCT in Honduras,” *Homeopathy*, 2007, doi: 10.1016/j.homp.2006.10.004.
- [8] S. Subenthiran *et al.*, “Carica papaya leaves juice significantly accelerates the rate of increase in platelet count among patients with dengue fever and dengue haemorrhagic fever,” *Evidence-based Complement. Altern. Med.*, 2013, doi: 10.1155/2013/616737.